ABSTRACT

A legged mobile robot having having at least a plurality of movable legs. This robot includes, in addition to a road surface touching sensor for confirming the ground touching state between the foot part and the road surface, a relative movement measurement sensor for measuring the relative movement between the foot part and the road surface. The robot has its operation controlled on the basis of the amount of relative movement between the foot part and the road surface, so that, when an offset is produced between the intended or scheduled trajectory and the actual trajectory, the operation may be controlled adaptively to execute the robot operation.